<u>**AMENDMENTS TO THE CLAIMS**</u>

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>**Listing of Claims**</u>:

1. (Currently amended) A method comprising:

at a base site:

- determining a need to receive a wireless transmission from a transmitter that is presently within communications range of the base site;

- automatically determining whether to selectively allocate a wireless relay resource to thereby at least attempt to increase a quality of service to support the wireless transmission from the transmitter that is presently within communications range of the base site<u>, wherein the wireless relay resource comprises a demodulation processing relay resource;</u>

<u>- providing an instruction to the wireless relay resource to cause the wireless relay resource to relay at least portions of the wireless transmission from the transmitter, wherein the instruction comprises providing at least identifying information regarding the transmitter.</u>

2. (Currently amended) The method of claim 1 wherein determining a need to receive a wireless transmission from a transmitter includes receiving a wireless message from the transmitter that includes an indication of a need to transmit the wireless ~~message~~ <u>transmission</u> to the base site.

3. (Original) The method of claim 2 wherein receiving a wireless message from the transmitter includes receiving the wireless message, at least in part, via a control channel.

4. (Currently amended) The method of claim 1 wherein automatically determining whether to <u>selectively</u> allocate a wireless relay resource to thereby at least attempt to increase a quality of service includes determining that a present wireless communication path between the transmitter and the base site will not likely support a desired effective data rate.

423606

5. (Original) The method of claim 4 wherein determining that a present wireless communication path between the transmitter and the base site will not likely support a desired effective data rate includes using information regarding link channel quality for at least one transmission from the base site to the transmitter.

6. (Original) The method of claim 1 wherein automatically determining whether to allocate a wireless relay resource to thereby at least attempt to increase a quality of service includes automatically determining whether to allocate a plurality of wireless relay resources to thereby at least attempt to increase the quality of service.

7. (Original) The method of claim 6 and further comprising allocating selected ones of the plurality of wireless relay resources to at least attempt to increase the quality of service.

8. (Original) The method of claim 7 wherein allocating selected ones of the plurality of wireless relay resources includes allocating some but not all presently available wireless relay resources.

9. (Currently amended) The method of claim 1 wherein automatically determining whether to selectively allocate a wireless relay resource to thereby at least attempt to increase a quality of service includes automatically determining whether to allocate a wireless relay resource that utilizes at least one carrier resource that is otherwise also shared by a communication system that includes the base site to effect direct communications between the base site and member communication units.

423606

10. (Currently amended) The method of claim 1 wherein automatically determining whether to selectively allocate a wireless relay resource to thereby at least attempt to increase a quality of service includes automatically determining whether to allocate a wireless relay resource that utilizes at least one carrier resource that is not otherwise also shared by a communication system that includes the base site to effect direct communications between the base site and member communication units.

11. (Canceled)

12. (Currently amended) The method of claim 1 ~~11~~ wherein providing an instruction to the wireless relay resource includes providing the instruction via a control channel.

13. (Original) The method of claim 12 wherein providing the instruction via a control channel includes providing the instruction via a control channel that is also used to exchange at least some control information between the base site and the transmitter.

14. (Currently amended) The method of claim 1 ~~11~~ wherein providing an instruction includes providing at least one of:
~~- identifying information regarding the transmitter;~~
- a particular transmission parameter to expect when receiving the transmission from the transmitter;
- a particular transmission parameter to use when relaying the transmission;
- identifying information regarding a particular channel to monitor to receive the transmission from the transmitter;
- identifying information regarding a particular channel to utilize when relaying the transmission to the base site.

15. (Canceled)

423606

16. (Canceled)

17. (Original) The method of claim 1 and further comprising:
- using relayed transmissions from a plurality of relay resources to receive the transmission from the transmitter.

18. (Currently amended) The method of claim 17 wherein using relayed transmissions from a plurality of relay resources includes ~~combining received~~ receiving, on a same time-frequency channel, portions of the relayed transmissions from various of the plurality of relay resources to reconstruct the transmission.

19. (Currently amended) The method of claim 18 ~~17~~ wherein ~~combining received~~ receiving, on a same time-frequency channel, portions of the relayed transmissions from various of the plurality of relay resources to reconstruct the transmission includes ~~combining and~~ decoding received portions of the relayed transmissions from various of the plurality of relay resources to reconstruct the transmission.

20. (Currently amended) The method of claim 1 and further comprising, at a wireless relay resource, combining received portions of relayed transmissions from the transmitter using hybrid automatic repeat request to reconstruct the transmission.

21. (Currently amended) The method of claim 20 wherein combining received portions of relayed transmissions from the transmitter using hybrid automatic repeat request to reconstruct the transmission includes combining and decoding received portions of relayed transmissions from the transmitter to reconstruct the transmission

22. (Currently amended) The method of claim 20 ~~19~~ and further comprising, at the wireless relay resource, relaying a reconstructed transmission to the base site.

423606

23. (Currently amended) The method of claim 1 ~~17~~ and further comprising combining received portions of relayed transmissions from ~~at least one~~ the wireless relay resource with portions of transmissions from the transmitter to reconstruct the transmission.

24. (Currently amended) The method of claim 23 wherein combining received portions of relayed transmissions from ~~at least one~~ the wireless relay resource with portions of transmissions from the transmitter to reconstruct the transmission ~~includes~~ comprising combining received portions of relayed transmissions from at least one wireless relay resource with portions of redundant transmissions from the transmitter to reconstruct the transmission.

25. (Currently amended) The method of claim 23 wherein combining received portions of relayed transmissions from ~~at least one~~ the wireless relay resource with portions of transmissions from the transmitter to reconstruct the transmission ~~includes~~ comprising combining received portions of relayed transmissions from at least one wireless relay resource with previously stored portions of transmissions from the transmitter to reconstruct the transmission.

26. (Canceled)

27. (Canceled)

28. (Original) The method of claim 1 wherein automatically determining whether to allocate a wireless relay resource includes automatically determining whether to allocate a wireless relay resource that comprises a demodulation and decoding processing relay resource.

29. (Original) The method of claim 1 and further comprising negotiating a data rate for the transmitter to utilize when transmitting the transmission.

30. (Original) The method of claim 1 wherein determining a need to receive a wireless transmission includes determining a need to receive a wireless transmission comprising bearer data and not system control information that corresponds to resource allocation.

31. (Original) The method of claim 1 and further comprising allocating a communication resource to the relay resource.

32. (Original) The method of claim 31 wherein allocating a communication resource to the relay resource includes providing a relayed transmission temporal directive that is subsequent to a temporal directive as is assigned to the transmitter to support the transmission from the transmitter.

33. (Original) The method of claim 32 wherein providing a relayed transmission temporal directive that is subsequent to a temporal directive includes allocating a time slot to support the relayed transmission that is subsequent to a time slot as is assigned to the transmitter for the transmission.

34. (Currently amended) The method of claim 1 wherein automatically determining whether to selectively allocate a wireless relay resource includes automatically determining whether to allocate a wireless relay resource that will:
- demodulate and decode the transmission from the transmitter to provide decoded information;
- determine whether the transmission has been likely correctly received;
- re-encode the decoded information to provide re-encoded information; and
- transmit the re-encoded information to the base site.

423606

35. (Currently amended) The method of claim 34 wherein automatically determining whether to selectively allocate a wireless relay resource that will:

- demodulate and decode the transmission from the transmitter to provide decoded information;

- determine whether the transmission has been likely correctly received;

- re-encode the decoded information to provide re-encoded information; and

- transmit the re-encoded information to the base site,

further includes:

- not transmitting to the base site any relayed transmissions that would be based upon transmissions that were likely not correctly received.

36. (Original) The method of claim 1 and further comprising automatically determining whether to allocate a wireless relay resource to thereby at least attempt to increase a quality of service to support a wireless transmission from the base site to the transmitter that is presently within communications range of the base site.

37. (Original) The method of claim 36 wherein automatically determining whether to allocate a wireless relay resource to thereby at least attempt to increase a quality of service to support a wireless transmission from the base site to the transmitter that is presently within communications range of the base site includes automatically determining whether to allocate a wireless relay resource to thereby at least attempt to increase a quality of service to support a wireless transmission from the base site to the transmitter that is presently within communications range of the base site but channel conditions for wireless transmissions from the base site to the transmitter are determined to be unacceptable due, at least in part, to channel characteristics.

38. (Original) The method of claim 37 wherein the channel characteristics comprise delay spread characteristics.

423606

39. (Original) The method of claim 1 and further comprising allocating a wireless relay resource that couples via a wireless link to the base site.

40. (Original) The method of claim 1 and further comprising allocating a wireless relay resource that couples via a wireline link to the base site.

41. (Currently amended) A communications controller comprising:
- a wireless transmitter and receiver;
- a resource allocator that is operably coupled to the wireless transmitter and receiver and that is responsive to a wirelessly transmitted signal from a remote unit that is within reception range of the receiver requesting allocation of a communication resource to facilitate transmission of information to the receiver;
- a relay resource activator that is operably coupled to the resource allocator, such that a relay resource having a demodulation processing relay resource can be selectively activated by the communications controller to improve quality of service for a wireless transmission from the remote unit when transmitting within reception range of the receiver and provides an instruction to the relay resource to cause the relay resource to relay at least portion of the wireless transmission from the transmitter, wherein the instruction comprises providing at least identifying information regarding the transmitter.

42. (Original) The communications controller of claim 41 wherein the resource allocator includes means for determining when to activate a relay resource to support a requested allocation of resources to facilitate the transmission of information to the receiver.

423606

43. (Original) The communications controller of claim 41 wherein the relay resource activator includes means for providing instructions to a given relay resource comprising at least one of:

- a particular data transmission rate to expect when receiving the transmission from the remote unit;
- a particular data transmission rate to use when relaying the transmission to the receiver;
- identifying information regarding a particular channel to monitor to receive the transmission from the remote unit;
- identifying information regarding a particular channel to utilize when relaying the transmission to the receiver.

44. (Original) The communications controller of claim 41 wherein the relay resource activator includes means for substantially simultaneously activating a plurality of relay resources to improve the quality of service for the wireless transmission from the remote unit.

45. (Original) The communications controller of claim 44 and further comprising reception means for receiving relayed transmissions from the plurality of relay resources and for reconstructing the wireless transmission from the remote unit by combining relayed transmissions from at least two of the plurality of relay resources.

423606